Chapter 2. Types of Airspace and National Park System Units

Airspace Over Parks

All airspace in the country, including the airspace over parks, is controlled by the FAA. The FAA coordinates with the various branches of the military, general aviation, and commercial airlines for their use of designated airspace.

Commercial park air tour operations occurring over parks will be jointly addressed in FAA/NPS air tour management plans.

AIRSPACE

■ Introduction

Airspace at first glance appears to be an unquantifiable and endless resource. In reality, the airspace is a limited and closely supervised resource with defined quantities and attributes with strict rules of use. In order for USAF and NPS personnel to fulfill their respective missions, it is imperative that they have a working knowledge of the airspace structure, the operational requirements of each of the various types of airspace, and the applicable rules for operating in concert with other users of the system.

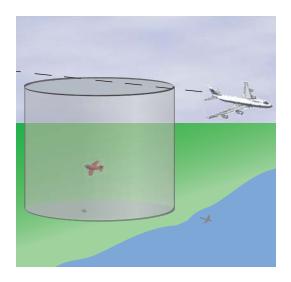
It is important that aircrews, airspace managers, and their counterparts in the National Park Service be familiar with the operational requirements of each of the various types of airspace. Such knowledge is needed in order to assess the impact on ground activity of an overlying airspace use, or to assess the potential for conflict with aircraft operations of an underlying land use.

Conceptualizing Airspace

When defining a section of airspace four criteria are considered.

Volume. Volume is a key concept to understanding the amount of airspace actually being used. The length and width of airspace are visible on a two-dimensional map, but the floor and ceiling of the area must also be included to see the complete picture, as airspace is always defined using three dimensions. Airspace used for flying operations could begin as low as the surface and extend upward over 50,000'. This unique characteristic of airspace enables numerous users to safely operate at the same geographical location, but at different altitudes.

Proximity. Airspace is often tied to an airfield or a military installation. The proximity affects the utility of a piece of airspace and its use. The military would like aircraft departing an installation to use the closest range and airspace possible in order to maximize training time and minimize transit time.



Time. Airspace is allotted for use for specific amounts of time. A designated block of airspace can be used to separate unusual flight maneuvers from other aircraft, and only minutes later that same block can be used to route aircraft to their final destinations. When not in use, airspace is often released back to the FAA for other users, an important aspect of the flexibility of airspace.

Attributes. Airspace attributes describe the physical characteristics of the underlying land that make certain pieces of airspace unique. Those attributes might be a range or a certain type of terrain needed to meet testing and training requirements, including open water, desert or mountains.

■ The Federal Aviation Administration (FAA) and Its Role

Congress has given the FAA the overall responsibility for managing the airspace of the United States and its territories to ensure the safety of aircraft and the efficient utilization of the airspace. The FAA constantly reviews civil and military airspace needs to ensure that all interests are served to the greatest extent possible.

The wide range of users who share the airspace above the country are generally grouped into three types: (1) general aviation, which includes commercial air tours and recreational flights, (2) commercial airlines, which use airspace to move

National Airspace Redesign (NAR)

NAR is an FAA initiative to review, redesign, and restructure the nation s airspace to meet the rapidly changing and increasing operational demands on the National Airspace System (NAS). The focus of the redesign is to have airspace that is safe, secure, and efficient. The FAA is working toward decreasing delay, while increasing flexibility, predictability, and user access. Senior members of the DOD Policy Board on Federal Aviation, along with representatives from the Department of Transportation and the FAA, are currently determining a plan for effective joint FAA/DOD interaction. A part of the user access is the DOD Special Use Airspace Program.

NAR s success is dependent on the involvement of many FAA organizations and programs, as well as external stakeholders. Internally, the Air Traffic Headquarters of the FAA is utilizing a collaborative approach, jointly engaging management and union leadership. Externally, they have reaffirmed their commitment to listen to and involve communities and governments regarding environmental and operational issues by using informal methods (e.g., briefings and informational meetings) and formal methods (e.g., working with advisory committees and public meetings).

people and cargo quickly from one location to another, and (3) the military services, which use airspace to conduct testing and training. When safe and separate airspace is required for military training and operations, the Air Force submits a request to the FAA and defines the amount of airspace and time needed to conduct training and operations, as well as the terrain requirements. The Air Force, local air traffic control (ATC) agencies, and the FAA work together to determine the best place to establish safe airspace. This process takes into account the needs of each type of airspace user and the environment and can often take years to complete.

The National Airspace System (NAS)

All aviation activities occur within the NAS, which consists of all airspace over the United States below 60,000' MSL. The FAA, as the controlling authority, promulgates numerous regulations that all parties, including the Air Force, must follow. These regulations divide the airspace into two broad categories, controlled airspace and uncontrolled airspace. Within these two categories, six classifications determine the flight rules, pilot qualifications, and aircraft capabilities required in order to operate within any section of the airspace.

Controlled Airspace. Controlled airspace is airspace of defined dimensions within which ATC service is provided. Controlled airspace is divided into five classes (A-E). ATC service is provided to aircraft in accordance with the instrument flight rules (IFR) and the visual flight rules (VFR) specified by the airspace classifica-

Class A Airspace. Class A airspace encompasses all airspace from 18,000' above mean sea level (MSL) to 60,000' MSL, including the airspace overlying the waters within 12 nautical miles (nm) of the coast of the 48 contiguous states and Alaska. All operations within Class A airspace must be under IFR and are under direct control of FAA controllers. This airspace includes a significant portion of the enroute structures (freeways), discussed below.

Class B Airspace. The airspace that surrounds the nation's busiest commercial airports is usually Class B airspace. These areas tend to be the most congested airspace and have the most complex mix of aircraft operations, with everything from single-engine trainers to high-speed jet transports. At its core, Class B extends from the surface up to 10,000' MSL. All operations within Class B require specific approval by ATC.

What are VFR and IFR?

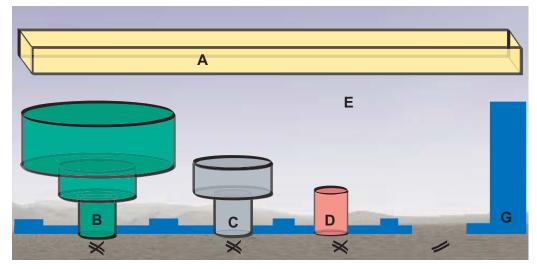
Throughout this section, you will see the terms IFR (instrument flight rules) and VFR (visual flight rules). General aviation aircraft flying between local airports, sightseeing, etc., comprise the majority of flying completed under VFR. VFR generally allows pilots to fly off published routes using visual references such as highways, power lines, railroads, or other such cues. In order to fly under VFR, the weather must meet or exceed the minimum requirements, which generally means there must be at least 3 miles of visibility and the pilot must be able to remain clear of clouds by at least 500. The minimum requirements change depending on the exact airspace classification. VFR flight is restricted to altitudes below 18,000 MSL and does not require flight clearances from ATC. VFR pilots exercise see and avoid clearance precautions, which means that they must be vigilant of their surroundings and alter their course or altitude, as necessary, to remain clear of other traffic, terrain, populated areas, cloud,

IFR requires pilots to be trained and certified in navigational methodologies and to adhere to ATC clearances containing specific flight route and altitude directions. ATC clearances and use of elaborate radar and navigational aid systems keep IFR aircraft separated from each other. The safe use of all airspace depends on both VFR and IFR aircraft adhering to the rules that apply to their operations.

The overall shape of Class B airspace can be likened to an upside down wedding cake of several layers. The exact dimensions and shape of the layers are individually tailored to meet local traffic and safety needs. The outer limit is usually 30 nm from the primary airport. To increase safety, the airspace is designed to minimize the number of turns aircraft are required to perform as they descend to an airport and as they take off from an airport, while still enabling other aircraft to safely transition the area. Examples of airports that have Class B airspace surrounding them include Boston Logan, Chicago O'Hare International, Dallas/Fort Worth International, Los Angeles International, New York Kennedy, and Ronald Reagan Washington National Airports.

Class C Airspace. Class C airspace surrounds busy commercial airports of midsized cities with a large number of commercial flight operations, as well as some military airports. Operating

Airspace Classifications: Class A through Class G



★ TOWERED AIRPORT

✓ NONTOWERED AIRPORT

control towers at the primary airport and radar services are key components of Class C. The overall shape is also that of an upside down wedding cake, but there are only two layers. The inner ring has a radius of 5 nm and extends from the surface up to but not including 4,000' AGL. The outer ring has a radius of 10 nm and extends from 1,200' AGL up to but not including 4,000' AGL. Examples of airports that have Class C airspace include Greater Buffalo International, Portland International, Tulsa International, and San Antonio International Airports.

Class D Airspace. Class D airspace is applied to civilian and military airports with operating control towers but where the traffic volume does not meet Class C or B standards and where radar service often is unavailable. Traffic in this airspace usually lacks heavy jet transport activity but often includes a complex mix of general aviation, turboprop, and business jet traffic. The general shape of Class D airspace is a 5 nm ring from the surface up to but not including 2,500' AGL. The ring may have one or more extensions to accommodate IFR traffic. Examples of airports having Class D airspace include those at Wilmington, DE, Trenton, NJ, Muncie, IN, Fargo, ND, Grand Canyon, AZ, and Palm Springs, CA.

Class E Airspace. Class E airspace extends upward from either the surface or a designated altitude to the overlying or adjacent controlled airspace. It includes all airspace from 14,500' MSL up to but not including 18,000' MSL. It also includes all other controlled airspace necessary for IFR operations at lower altitudes but not already classified as Class A-D.

Uncontrolled Airspace.

Class G Airspace. Class G airspace is uncontrolled airspace and includes all airspace not otherwise designated as Class A-E.

Enroute Structures

When people drive from one large city to the next, they leave their homes and wind their way through traffic and cross intersections until they get to a freeway and speed off toward their destination. When close to their destination city, they exit the freeway and wind their way through the traffic, crossing intersections, until they reach their end point. Commercial air travel follows similar procedures. Aircraft take off from an airport and climb through congested airspace to an enroute structure (freeway) that expedites their travel. Upon approaching their destination, they descend again though another congested airspace to land. The one key difference between airline travel and vehicle travel is that vehicles have the luxury of being able to stop at an intersection to allow crossing traffic, while aircraft cannot. Enroute structures consist of several routing corridors, which are essentially highways in the sky, utilized by both IFR and VFR traffic.

Low Altitude Airways (Victor Airways). Victor Airways are "highways" utilized by both IFR and VFR traffic. They are 8 nm wide and generally go from 1,200' AGL up to but not including 18,000' MSL. The airway floor varies to ensure that aircraft operating on the airway remain clear of ground obstructions and have the ability to receive the radio signals from the navigational facilities. These airways are depicted on aeronautical charts as blue shaded lines with a "V," hence the term *victor*, followed by a number (e.g., V-820).

Jet Routes. Jet routes serve the same function as the low altitude airways except that they are found at 18,000' MSL and above, up to 45,000' MSL. The traffic on a jet route is always operating under IFR and is managed by ATC.

VFR Flyways. VFR flyways are general routes for VFR traffic wishing to fly near or through Class B airspace. The intent is to provide greater protection to IFR traffic by encouraging VFR traffic into preferred routes away from the critical IFR operations. Flyways may be charted on terminal area charts, but they may also be known and used locally only through word of mouth. The best way to determine if a flyway exists locally is to ask the controlling ATC facility.

VFR Corridors. VFR corridors are basically "holes" in Class B airspace with specific horizontal and vertical boundaries through which pilots may pass through the airspace without obtaining a clearance or maintaining communication with ATC. They are similar to VFR flyways except that they have specific dimensions, which must be followed by all participating aircraft.

VFR Transition Routes. VFR transition routes are similar to VFR corridors and are used to accommodate VFR traffic passing through certain Class B airspace. The difference from a VFR corridor is that a transition route requires clearance from ATC, and radar separation service is always provided.

Special Use Airspace (SUA)

SUA is an airspace designation that alerts users to areas of unusual flight hazards and separates that activity to enhance safety.

Military Operations Area (MOA).

A MOA is airspace designated for military training activities including acrobatic or abrupt flight maneuvers. Activities conducted in MOAs include but are not limited to aerobatics, air combat tactics, and formation training. MOAs have a defined floor and ceiling, which can range from the surface up to the floor of Class A airspace (18,000' MSL). VFR aircraft are not restricted from transiting MOAs. However, transitioning IFR aircraft can only be

cleared through an activated MOA if ATC can safely keep them separated from the other activities in the MOA.

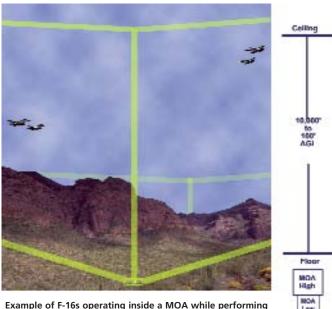
MOAs are depicted on maps in this publication with a solid blue line with an identifier followed by the word "MOA", e.g., SALINE MOA or JACKAL MOA.

Alert Area. Alert areas contain activities that present a hazard to other aircraft such as a high volume of pilot training or an unusual type of aerial activity. The types of flying involved in alert areas can be military training, aircraft manufacturer testing, or a high concentration of flights (e.g., helicopter activity near oil rigs).

Alert Areas are depicted on maps in this publication with a solid dark gray line with the letter "A" followed by an alphanumeric identifier, e.g., A231 or A682A.

Prohibited Area. Prohibited areas prohibit overflight of a surface area in the interest of national security or environmental protection. Aircraft are prohibited from flying within a prohibited area without permission of the using agency. Interestingly, there are no prohibited areas managed by the DOD. Examples of prohibited areas include the White House, the National Mall, and Camp David.

Prohibited areas are depicted on maps in this publication with a solid pink line with the letter "P" followed by an alphanumeric identifier, e.g., P40 or P56A.



simulated air-to-air combat

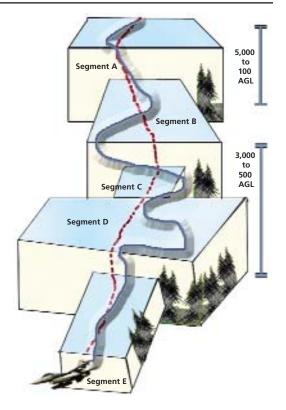
Restricted Area. Restricted areas are established where ongoing or intermittent activities create unusual and often invisible hazards to aircraft, such as artillery firing, aerial gunnery, practice bomb dropping, and guided missile testing. Restricted areas differ from prohibited areas in that most have specific hours of operation and entry during these hours requires specific permission from the FAA or the agency that controls the area.

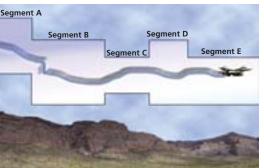
Restricted Areas are depicted on maps in this publication with a solid red line with the letter "R" followed by an alphanumeric identifier, e.g., R2508 or R2301W.

Warning Area. Warning areas contain the same kind of hazardous flight activity as restricted areas and MOAs, but are located offshore over domestic and international waters. Examples of likely hazards include artillery firing, aerial gunnery, guided missile exercises, and practice

Elements of an MTR (top) and side view of an MTR (bottom):

MTRs could be viewed as a series of individuals segments of airspace which may vary in size from one block to the next, and which are linked together by a common thread known as the centerline. The aircraft that fly the MTR are required to stay within the blocks of airspace, and generally fly along the centerline but are not required to. The blue line in these illustrations could represent an actual aircraft's flight path along an MTR.





aircraft interceptions. Warning areas generally begin 12nm off shore.

Warning Areas are depicted on maps in this publication with a solid light gray line with the letter "W" followed by an alphanumeric identifier, e.g., W289 or W285B.

Controlled Firing Area (CFA). CFAs contain civilian and military activities that could be hazardous to nonparticipating aircraft. These include rocket testing, ordnance disposal, and small arms fire. CFAs are differentiated from MOAs and restricted areas in that the hazardous activities are suspended to avoid a potential hazard to nonparticipating aircraft. Radar or a ground lookout is utilized to indicate when an aircraft might be approaching the area, and activities are then suspended.

Airspace for Special Use (ASU)

ASU is a term used collectively to identify other airspace established for military use that does not meet the criteria for SUA. ASU is airspace of defined dimensions wherein activities must be confined because of their nature, and/or wherein limitations may be imposed upon aircraft operations that are not part of the special activities.

Air Traffic Control Assigned Airspace (ATCAA).

ATCAAs were established to permit the continuation of MOA activities above 18,000' MSL. From the standpoint of the users, MOA and ATCAA are combined into one piece of airspace, with 18,000' MSL acting as an administrative boundary. Usually, the ATCAA is activated concurrently with the MOA. VFR aircraft are permitted to enter a MOA, but are not permitted to enter most ATCAAs because they are not permitted to fly VFR above 18,000' MSL. MOAs are depicted on aeronautical charts, but ATCAAs are not depicted.

Military Training Routes (MTRs). The Air Force trains in a wide range of tactics, one of which is low-level combat. The MTR program is a joint venture by the FAA and the DOD to develop MTRs for the purpose of conducting low-altitude, high-speed training. Generally MTRs are established below 10,000' MSL for operations at speeds in excess of 250 knots. Each segment of an MTR route is allocated a floor and ceiling altitude and lateral boundaries. The floor may be at the earth's surface or at any altitude above the surface. Lateral boundaries are described by nautical miles left and right of the route.

Navigational Aids / Range Instrumentation

To safely and effectively control their assigned airspace, the military and FAA maintain radars, sensors, and communication facilities, often in remote areas such as national parks and wilderness areas. The data gathered is shared to the maximum extent possible.



The F-16 Fighting Falcon is a compact, multi-role fighter. (USAF photo by Senior Airman Greg L. Davis.)

MTRs are subdivided into three types:

IFR Military Training Route (IR). Operations on IR routes are conducted in accordance with IFR regardless of weather conditions. IR routes are depicted on maps in this publication with a green dashed line.

VFR Military Training Route (VR). Operations on VR routes are conducted in accordance with VFR, except flight visibility must be at least 5 nm and the cloud ceiling must be at least 3,000' AGL. VR routes are depicted on maps in this publication with a blue dashed line.

Slow Speed Low Altitude Training Routes (SR). About 200 SRs in the United States are used for military air operations at or below 1,500' AGL and at air speeds of 250 kts or less. SR routes are depicted on maps in this publication with a red dashed line.

For identification purposes:

- · Routes are one-way, so the same route flown in the opposite direction will have a separate distinct identifier.
- MTRs with no segment above 1,500' AGL are identified by four numbers, e.g., IR-1206 or VR-1207.
- MTRs that include one or more segments above 1,500' AGL are identified by three numbers, e.g., IR-207 or SR-207.
- · Alternate IR/VR routes or route segments are identified by using the principal route designation followed by a letter suffix; e.g., IR-oo8A or VR-1007B.

Other Military Airspace Structures

Due to the unique nature of military operations and training and testing requirements, other airspace for special military use has been developed outside of the SUA and ASU programs.

Low Altitude Tactical Navigation Areas (LATN).

LATNs are large, clearly defined geographical areas where the Air Force practices random VFR tactical navigation that typically ranges from 500' to 1,500' AGL at or below 250 kts. The floor and ceiling altitudes may vary depending on the objective of the training mission and could be flown as low as 300' AGL. These areas are not charted; however, current information concerning LATNs is available from the local USAF facilities if questions arise.

Temporary Special Use Airspace (TSUA). The military and the FAA have the ability to create temporary MOAs or temporary restricted areas to accommodate the specific needs of a particular military exercise. This information is available via either the Notice to Airmen (NOTAM) system or by direct contact with the FAA regional headquarters.

Temporary Flight Restriction (TFR). A TFR can be established to protect people or property from a temporary hazard when the presence of low-flying aircraft would magnify, alter, spread, or compound the hazard. A TFR would provide a safe environment for the operation of disaster relief aircraft or prevent any unsafe congestion of sightseeing aircraft above an incident or event, which may generate a high degree of interest. TFRs are commonly used to increase the safety of aircraft performing aerial firefighting operations. This information is available via NOTAM, and to preclude misunderstanding, the implementing NOTAM will contain specific and formatted information (see the example at the bottom of the page).

Example NOTAM: The Olympics at Salt Lake City

2/0714 - UT.. TEMPORARY FLIGHT RESTRICTIONS SALT LAKE CITY, UT. (2002 WINTER **OLYMPIC GAMES/E CENTER). EFFECTIVE 0701 UTC FEBRUARY 6, 2002 UNTIL 0700 UTC** FEBRUARY 25, 2002, PURSANT TO CFR 14 SECTION 91.145 AIRCRAFT FLIGHT OPERA-TIONS ARE PROHIBITED WITH A 2 NM RADIUS OF 404208N/1115706W OR THE SALT LAKE CITY VORTAC /SLC / 155 DGREE RADIAL AT 9 NAUTICAL MILES BELOW FL180. THE UTAH OLYMPIC PUBLIC SAFETY COMMAND, 801-257-2700, IS THE POINT OF CONTACT. CEDAR CITY AFSS, 435-586-1412, IS THE FAA COORDINATING FACILITY. WIE UNTIL UFN.



An F-15C prepares for aerial refueling.

(Photo courtesy of U.S. Air Force by Master Sgt.

Aerial Refueling (AR) Tracks and Anchors. AR tracks and anchors exist where the Air Force refuels its aircraft involved in training. They occur almost exclusively within Class A airspace. The AR track is normally 50-100 nm long, and the width is normally 4 nm to either side of a centerline unless otherwise specified.

Cruise Missile Route. Cruise missile operations conducted in excess of 250 kts and below 10,000' MSL are conducted in restricted areas, MOAs, and/or along selected IR MTRs during daylight hours under VFR conditions. Cruise missiles will be accompanied by two chase aircraft escorts that at all times have the ability to maneuver the missile out of the flight path of conflicting traffic.

National Security Area (NSA). An NSA is designated where there is a requirement for increased security and safety of ground facilities. When it is necessary to provide a greater level of security and safety, flight in NSAs may be temporarily prohibited by regulation under the provisions of Federal Aviation Regulation (FAR) Part 99.7.

Local Flying Areas. Most military facilities develop local flying areas within which they can conduct routine, nonhazardous training activity. These areas are normally developed in conjunction with local FAA controllers and airspace managers and are planned to not conflict with other airspace, such as Class B, C, or D airspace, SUAs, or ASUs.

Air Force Ranges

The Air Force needs ranges to test its weapons systems and train its aircrews. The increasing sophistication of aircraft and weapons requires testing and training to be as demanding and realistic as possible. No matter how capable aircraft and weapons become, each aircrew member must train in the individual skills and tasks required to become proficient. If the training gained during range missions can safely sim-

ulate the experience of combat, the aircrew's effectiveness will increase. The Air Force considers ranges and range infrastructure as national assets without which the nation's combat readiness would suffer.

What is a Range? A range is any land mass or water body and the associated airspace overlying it. Operationally it is a designated area established to conduct operations, training, research and development, and test and evaluation of military systems, personnel, tactics, munitions, explosives, or electronic combat systems. Range capabilities and services vary and are dependent upon test and training requirements delineated by the MAJCOMs.

Training. The types of training on ranges differ in terms of complexity, goals, and number of participants, all of which influence the requirements for the ranges and training areas. Air-to-air training requires airspace sufficient for the intended training, while air-to-ground training requires both surface area and related airspace. Where some type of target representation is required, it is often enhanced by scoring/feedback systems and is often accompanied by electronic threat emitters. In cases where some type of ordnance is actually released from the air-craft, the surface area must provide a large enough buffer zone to ensure public safety.

Test and Evaluation (T&E). T&E is an integral part of the weapons acquisition process. T&E allows decisions to be made about systems and technical performance, effectiveness, and suitability. Ranges support the testing and evaluation of new systems, improvement of existing weapons, and verification of the reliability of weapons stockpiles. Testing of aircraft handling qualities and performance, tactics evaluation, and weapons effects testing all require ranges. Range land and airspace, infrastructure, instrumentation, targets, and communications capabilities all compose integral components of T&E systems.

Edwards Air Force Base range targets



Canyonlands National Park



White Sands National Monument New Mexico



Mojave National Preserve California



Bent's Old Fort National Historic Site Colorado (Photo courtesy of Bill Witmer.)



Jefferson National Memorial Washington, DC

NATIONAL PARK SYSTEM

Overview

The National Park System includes a great variety of nationally significant sites that together represent many of the outstanding natural, cultural, and recreational resources of the country. Whenever lands and waters are considered for inclusion in this system, they must first meet specific criteria for possessing nationally significant natural or cultural resources. However, not all such resources are included in the National Park System. Potential national parks must also represent a type of resource that is not already adequately represented in the National Park System or comparably protected for public enjoyment as part of some other federal, tribal, state, local government, or private system. The National Park Service recognizes that the protection of the country's national heritage requires the cooperative efforts of a great variety of land managers, and it works to support these efforts by partnering with others as well as by managing the lands included in national parks.

The numerous designations given to the units of the National Park System (park, monument, historic site, battlefield, etc.) represent the great diversity of resources included in the system. The designations are specified in the congressional legislation or the executive orders authorizing each unit. The names generally indicate the kinds and extent of resources included in the unit, although many units contain a great diversity of resources that would fit into several categories. The names also generally indicate the types of use these units receive. For example, most of the cultural units (historic sites) and most of the smaller monuments and memorials receive only day use, while many of the national parks, recreation areas, larger monuments, seashores, and lakeshores receive a considerable amount of overnight use.

The characteristics that generally describe the various units of the National Park System are summarized below. Regardless of their specific designations, all units of the National Park System have met criteria for national significance and are protected equally under the authorities of the National Park Service. All of the units are generically referred to as parks.

Types of National Park System Units

National Park. These are generally large natural places having a wide variety of resources, at times including significant historic assets. National parks are often major visitor destinations, where people plan to stay for several days. Approximately 15 percent of all park visitors stay overnight inside the park, and in 2001 some 1.3 million visitors spent the night in a park backcountry area. Hunting, mining, and consumptive activities are not authorized. Examples: Yosemite (CA) and Grand Canyon (AZ)

National Monument. The Antiquities Act of 1906 authorized the President to declare by public proclamation landmarks, structures, and other objects of historic or scientific interest situated on lands owned or controlled by the government to be national monuments. National monuments are usually smaller than national parks and lack the diversity of attractions. Examples: Lava Beds (CA) and White Sands (NM)

National Preserve. National preserves are areas having characteristics associated with national parks, but in which Congress may permit one or more of the following activities not normally authorized in national parks: public hunting, trapping, grazing, or oil/gas exploration and extraction. Examples: Mojave (CA) and Gates of the Arctic (AK)

National Historic Site. Usually, a national historic site contains a single historical feature that was directly associated with its subject. Derived from the Historic Sites Act of 1935, a number of historic sites were established by Secretaries of the Interior, but most have been authorized by acts of Congress. Examples: Fort Bowie (AZ) and John Muir (CA)

National Historical Park. This designation generally applies to historic parks that extend beyond single properties or buildings. They are commonly of greater physical extent and complexity than national historic sites. Examples: Appomattox Court House (VA) and Saratoga (NY)

National Memorial. A national memorial is commemorative of a historic person or episode; it need not occupy a site historically connected with its subject. Examples: Coronado National Memorial (AZ) and Vietnam Veterans Memorial (DC).



Antietam National Battlefield Maryland



Lake Mead National Recreation Area Nevada



Pictured Rocks National Lakeshore Michigan



Blue Ridge Parkway Virginia (Photo courtesy of Bill Witmer.)

National Battlefield. This general title includes national battlefield, national battlefield park, national battlefield site, and national military park. In 1958, an NPS committee recommended national battlefield as the single title for all such parklands. Examples: Manassas (VA) and Antietam (MD)

National Cemetery. There are presently 14 national cemeteries in the National Park System, all of which are administered in conjunction with an associated unit and are not accounted for separately. Examples: Antietam (MD) and Fredericksburg (VA)

National Recreation Area. Twelve recreation areas in the system are centered on large reservoirs and emphasize water-based recreation. Five other NRAs are located near major population centers. Such urban parks combine scarce open spaces with the preservation of significant historic resources and important natural areas in locations that can provide outdoor recreation for large numbers of people. In 2001, the recreation areas accounted for 17 percent of all visits to the National Park System. Approximately 8 percent of visitors to national recreation areas spend a night inside the recreation area. Examples: Golden Gate (CA) and Lake Mead (NV)

National Seashore. Ten national seashores have been established on the Atlantic, Gulf, and Pacific coasts; some are developed and some relatively primitive. The national seashores focus on the preservation of natural values while at the same time providing water-oriented recreation. Hunting is allowed at many of these sites. Examples: Point Reyes (CA) and Cape Hatteras (NC)

National Lakeshore. The four national lakeshores, all on the Great Lakes, closely parallel the seashores in character and use. Examples: Pictured Rocks (MI) and Apostle Islands (WI)

National River. There are several variations to this category: national river and recreation area, national scenic river, wild river, etc. The first was authorized in 1964 and others were established

following passage of the Wild and Scenic Rivers Act of 1968. National rivers preserve ribbons of land bordering on free-flowing streams that have not been dammed, channelized, or otherwise altered. Besides preserving rivers in their natural state, these areas provide opportunities for outdoor activities such as hiking, canoeing, and hunting. Examples: Ozark (MO) and Obed

National Parkway. The title *parkway* refers to a roadway and the parkland paralleling the roadway. All were intended for scenic motoring along a protected corridor and often connect cultural sites. There are four national parkways in the Washington, DC, area. Examples: George Washington (DC) and Rock Creek (DC)

National Trail. National scenic trails and national historic trails are linear parklands authorized under the National Trails System Act of 1968. Totaling more than 3,600 miles, they are generally long-distance footpaths winding through areas of natural beauty. Examples: Lewis & Clark (OR) and Juan Bautista de Anza (AZ and CA)

Affiliated Areas. In an Act of August 18, 1970, the National Park System was defined in law as "any area of land and water now or hereafter administered by the Secretary of the Interior through the National Park Service for park, monument, historic, parkway, recreational or other purposes." The affiliated areas comprise a variety of locations in the United States and Canada that preserve significant properties outside the National Park System. Some of these have been recognized by acts of Congress, others have been designated national historic sites by the Secretary of the Interior under authority of the Historic Sites Act of 1935. All draw on technical or financial aid from the National Park Service. Examples: Pinelands National Preserve (NJ) and Jamestown National Historic Site (VA)

Other Designations. Some units of the National Park System bear unique titles or combinations of titles, like the White House and Prince William Forest Park.



Cape Cod National Seashore, Massachusetts (Photo courtesy of Bill Witmer)